



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/932,652	09/18/97	SCHULTEN	019557.0121

BAKER & BOTTS  
2001 ROSS AVENUE  
DALLAS TX 75201-2916

QM61/1105

EXAMINER
WAYNER, W

ART UNIT	PAPER NUMBER
3744	

DATE MAILED: 11/05/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/932,652

Applicant(s)

JEAN SCHOLTEN ET AL

Examiner

W. WAYNER

Group Art Unit

3744

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on ~~11/18/97~~ 9/18/97
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-48 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-6, 8, 15-20, 22, 29-34, 36, 43-48 is/are rejected.
- ☒ Claim(s) 7, 9-14, 21, 23-28, 35, 37-42 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of References Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

Office Action Summary

Application/Control Number: 932,652

Art Unit: 3744

PAGE 3 15

MISSING

ATTORNEY WILL  
PROVIDE

Page 2

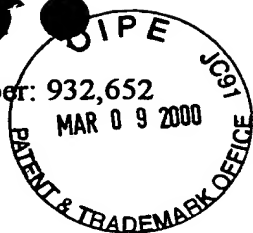
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 15, 16, 18, 19, 29, 30, 32, 33, , 45, 46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nurczyk taken in combination with Official Notice, Matsunaga, Takahashi et al. Nurczyk shows the combination of a variable air volume terminal in which a room temperature sensor 60 along with a temperature set point device generates an air flow set point (i.e. a commanded valve position), an air flow sensor 62 output which is compared with the commanded valve position and a controlled air volume damper 50. Official notice is taken that plural flow sensing inputs are conventionally used to determine air flow rate. The secondary references show that it is conventional in automatic control to implement a comparison of a set point and a measured variable using fuzzy logic. The applicant has apparently conceded this point in view of the lack of an explanation in detail regarding this procedure. In order to provide a more detailed operative disclosure, it would have been obvious to provide plural flow sensors and fuzzy logic into the primary references.

Claims 3, 8, 17, 22, 31 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied claim 1 and further <sup>IN VIEW</sup> ~~in view~~ of Tate et al, which shows remote and local control of an air terminal. In order to achieve wider control capability, it would have been obvious to provide Nurczyk with remote control.

Art Unit: 3744



Claims 6, 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 and further in view of Natale et al which shuts down air flow in response to a fire condition.

In order to prevent the spreading of a fire it would have been obvious to provide the primary reference with a fire mode control.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-48 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims are considered to be directed to new matter because the original specification and claims were only directed to an air volume controller and there is nothing in the original case which would indicate that the instant control scheme was intended to be used on any medium except air. The reference to col. 7 concerning the use of hot water is clearly an add-on feature to the basic air volume controller.


Application/Control Number: 932,652

Page 4

Art Unit: 3744

Claims 7, 9-14, 21, 23-28, 35, 37-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

W. Wayner:lm  
October 16, 1998  
(703) 308-1041

  
William Wayner  
Primary Examiner